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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,344	01/30/2004	Simon Garry Moore	1010.69525	6373

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EXAMINER

KENNEDY, JOSHUA T

ART UNIT PAPER NUMBER

3679

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/768,344

Applicant(s)

MOORE, SIMON GARRY

Examiner

Joshua T. Kennedy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) 2, 3, 6, 11, 13, 14, 19, and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 7-10, 12, 15, 16 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 17 and 18 have been cancelled per applicants request (See Applicants Amendment A, dated 11/16/2005).

Claims 2, 3, 6, 11, 13, 14, and 21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/8/2005.

Claims 1,4,5,7,8,9,10,12,15,16, and 20 have been examined.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because the same reference characters have been used to identify variations of the same name parts, e.g. "2" in Fig. 1 is different from "2" in Fig. 4 and Fig. 5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

Page 16, Line 1: "if" should be changed to --of--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, specifically referring to the combination/subcombination of the securing apparatus and releasing tool.

The releasing tool is only an inferred element intended for use with the securing apparatus of claim 1. Now, claim 20 seeks to positively include it. Accordingly, either the tool needs to be positively recited as part of the apparatus in claim 1 or else claim 20 needs to be cancelled (or subjected to a restriction requirement).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4,5,7,8,9,10,12,16, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Howard (US Patent 3,473,202).

As to Claim 1. Howard discloses a securing apparatus comprising:

a deformable body (A), wherein the body is configured to provide a secure interference fit with at least one article to which it is fitted (Col 1, Lines 35-43),
and

an aperture within the body (16), wherein the aperture is configured to accept a releasing tool (14),

wherein the securing apparatus is only unlocked by the operation of the releasing tool with respect to the body and remains locked at all other times, where the securing apparatus is fully unlocked by the operation of the releasing tool with respect to the body and is locked at all other times upon removal of the releasing tool (Col 1, Lines 35-43; Examiner considers the securing apparatus to be “fully unlocked” when the releasing tool opens the collar to allow a shaft to be placed within the collar; Subsequently, the releasing tool is considered to be

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“removed” once it is completely backed out of the threaded hole, causing the collar/body to be locked on the shaft).

As to Claim 4. Howard discloses the body joining a plurality of articles together (Fig 4).

As to Claim 5. Howard discloses the body containing at least one slot (12) that is substantially perpendicular to the aperture and which bisects at least one side of the aperture (Fig 1).

As to Claim 7. Howard discloses the body containing a plurality of apertures (10, 13, 16, 23).

As to Claim 8. Howard discloses the securing apparatus securing a plurality of articles, each of which can be released individually (Fig 4).

As to Claim 9. Howard discloses the absence of the releasing tool from the aperture ensuring that the securing device is in a locked position by default (Col 1, Lines 35-43).

As to Claim 10. Howard inherently discloses the dimensions of the body of the securing device when the releasing tool is not operated are such that the

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securing apparatus cannot be connected to the article to which it is to be secured (Col 1, Lines 35-43).

As to Claim 12. Howard discloses the body is configured to include at least one seal (B) that itself is capable of stopping any leakage of material from within a secured article.

As to Claim 16. Howard discloses at least one article to be secured being solid (Claim 1, Line 1).

As to Claim 20. Howard discloses the releasing tool (14) containing a threaded section that is configured so that the securing apparatus is unlocked by inserting the releasing tool into a complementary threaded area of the securing apparatus, to a point where the required widening of an area of the aperture is achieved (Col 1, Lines 35-43).

Regarding Claim 20. It is well established that a recitation with respect to the manner in which an apparatus is intended to be employed, *i.e.*, a functional limitation, does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963). Where the prior art reference is

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inherently capable of performing the function described in a functional limitation, such functional limitation does not define the claimed apparatus over such prior art reference, regardless of whether the prior art reference explicitly discusses such capacity for performing the recited function. In re Ludtke, 441 F.2d 660, 169 USPQ 563 (CCPA 1971). In addition, where there is reason to believe that such functional limitation may be an inherent characteristic of the prior art reference, Applicant is required to prove that the subject matter shown in the prior art reference does not possess the characteristic relied upon. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986); In re Ludtke, 441 F.2d at 664, 169 USPQ at 566 (CCPA 1971); In re Shreiber, F.2d at 44 USPQ2d 1429 (Fed. Cir. 1997).

The prior art laid forth shows all of the structural elements claimed and is inherently capable of performing the functions as claimed. If applicant claims that it cannot, they need to review the claims to ensure that they have all of the necessary structural elements recited.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Howard.

Howard does not explicitly disclose at least one article to be secured being tubular, but discloses a "prestressed shaft gripping element." (Claim 1, Line 1). It would be obvious to one of ordinary skill in the art to utilize a tubular element as the shaft because this equivalent substitution would lead to a reduction of weight of the shaft being used regardless of application.

Response to Arguments

Applicant's arguments filed 11/16/05 have been fully considered but they are not persuasive.

In response to applicant's arguments that

Howard fails to disclose all of the features recited in amended claim 1. Specifically, the releasing tools or screw 14 in Howard is not removed from the collar A, but instead is retained in the collar during use to adjust tension on the unit when the screw is turned... [and] the securing apparatus is either fully locked or fully unlocked, depending on whether or not the releasing tool is inserted,

First, Claim 1 only actively recites a deformable body having an aperture configured to accept a releasing tool. Secondly, there is no structure to support the "wherein" clause that distinguishes from Howard. Thirdly, the argument

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regarding "fully locked or fully unlocked" state is not commensurate with the scope of the claims or the disclosure. It does not depend on whether or not the releasing tool is inserted, rather depends on the operation of the releasing tool. It is also noted on page 17, lines 3-5 of the instant disclosure that the releasing tool can be partially removed, hence "retained in the collar during use to adjust tension on the unit". Also, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As stated in the rejection above, Examiner considers the securing apparatus to be "unlocked" when the releasing tool opens the collar to allow a shaft to be placed within the collar and the removal of the releasing tool to occur once it is completely backed out of the threaded hole, causing the collar/body to be locked on the shaft, thus performing the intended use of fully unlocking and locking the securing apparatus.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory

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period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 4,190,378 to Stecklein cited to show an articulated joint utilizing Belleville spring seals in securing a plurality of articles together.

US 5,851,084 to Nishikawa cited to show a connector for securing a plurality of articles together.

US D342,891 to Marui cited to show a connector for securing a plurality of articles together and disengaging them individually .

US 5,096,327 to Ruland cited to show a connector for securing a plurality of articles together having a preloaded shape and, when deformed by a releasing tool, accepts a shaft.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua T. Kennedy whose telephone number is (571) 272-8297. The examiner can normally be reached on M-F: 7am - 3:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTK
11/23/2005

A handwritten signature in black ink that reads "Daniel P. Stodola". The signature is written in a cursive style with a large, looped initial "D".

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600